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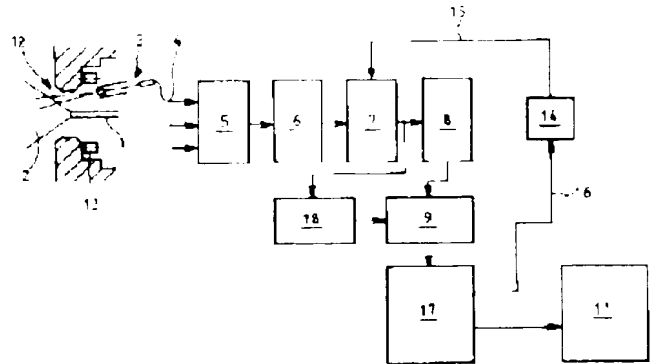
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TITLE : COMBUSTION DIAGNOSING DEVICE



ABSTRACT : PURPOSE: To enable an automatic adjustment of an applied voltage for an opto-electrical converter to be performed and to improve a reliability of combustion state diagnosis in a combustion diagnosing device in which a flame of a burner detected by an optical probe is divided and converted into an electrical signal and a flame combustion state is diagnosed in response to the electrical signal.

CONSTITUTION: Each of a plurality of flames 2 of a plurality of burners 1 arranged in a boiler is detected by optical probes 3. Light from each of the optical probes 3 is scanned by an optical scanner 5 and sent in sequence to an optical divider 6, and then the light after divided is converted into an electrical signal by an opto-electrical converter 7. This electrical signal is sent to a control device through an amplifier 8 and an A/D converter 9. a combustion state of each of the burners 1 is diagnosed and a result of diagnosis is displayed in a displaying device 11. The diagnosing device described above is provided with a calculation control device 17 for sending an applied voltage adjusting signal 16 to a power supply 14 for the opto-electrical converter. In the case that an S/N ratio of a digital signal from the A/D converter 9 is inferior, the applied voltage adjusting signal 16 is outputted, and then the applied voltage for the opto-electrical converter 7 is adjusted in such a manner that the digital signal becomes a proper value.

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